

2004-05 Preliminary Influenza Season Summary

Background

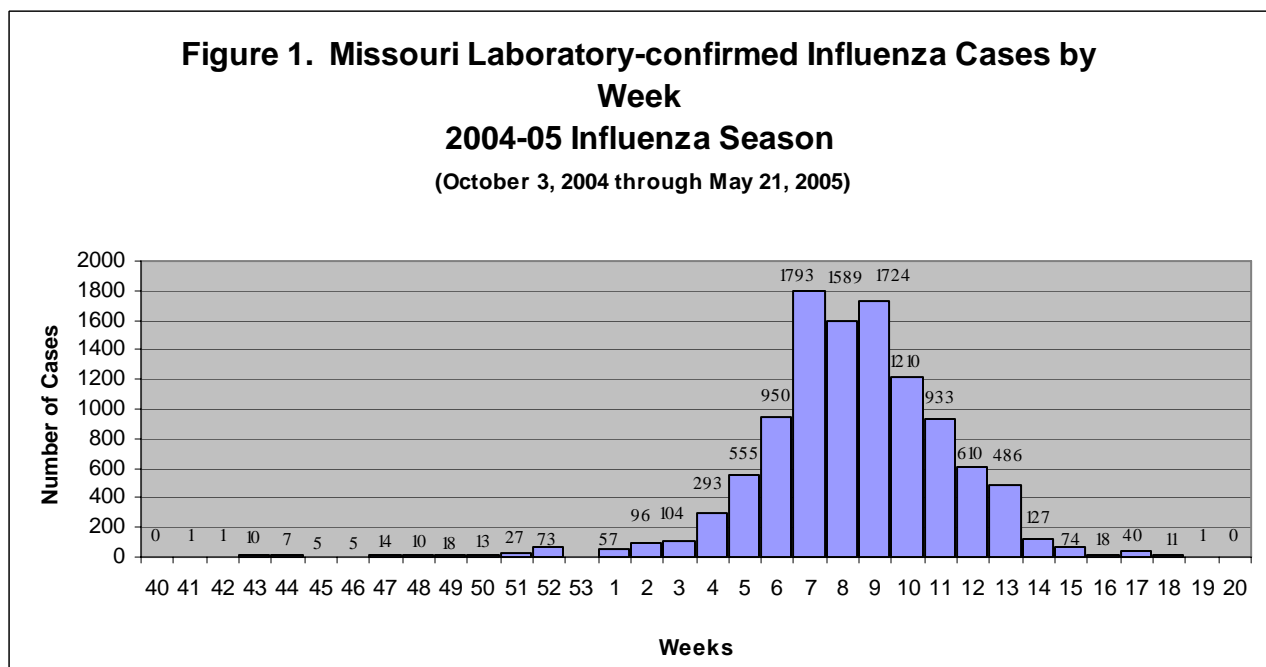
Influenza is a highly contagious viral respiratory illness that affects the health of large numbers of people every year. On average nationally, influenza is annually associated with more than 36,000 deaths and more than 200,000 hospitalizations. In Missouri, influenza and pneumonia are associated with approximately 1,500 - 3,000 deaths per year. The economic impact of influenza illness is staggering. Studies have shown that in an average year, direct and indirect medical costs in the U.S. are in the billions of dollars.

Although influenza does not appear on the list of nationally notifiable diseases/conditions, due to the vast health and economic impacts and the continuous mutation of current strains, the Department of Health and Senior Services has chosen to track/monitor the incidence of human influenza in Missouri. Missouri is one of very few states that collect individual influenza case data. With additional worldwide concerns regarding the emergence of avian influenza and its potential pandemic spread to the human population, Missouri will continue to monitor influenza in humans. Influenza is included as a reportable condition in the DHSS reporting rule 19 CSR 20-20.020.

Influenza data is collected by season as opposed to by calendar year due to the fact that influenza is seasonal in nature. Each influenza season begins in early October (Week 40) of one calendar year and ends in late May (Week 20) of the next calendar year. Weeks are based on the CDC calendar, which calculates a week from Sunday through Saturday. A weekly report is produced using a variety of data from MOHSIS (where individual case data as well as summary case data is collected), the State Public Health Laboratory, and others. The 2004-2005 end of season report follows, which includes serotype and rate maps, by jurisdiction.

2004-2005 Influenza Season – Season Case¹ Count = 10,855

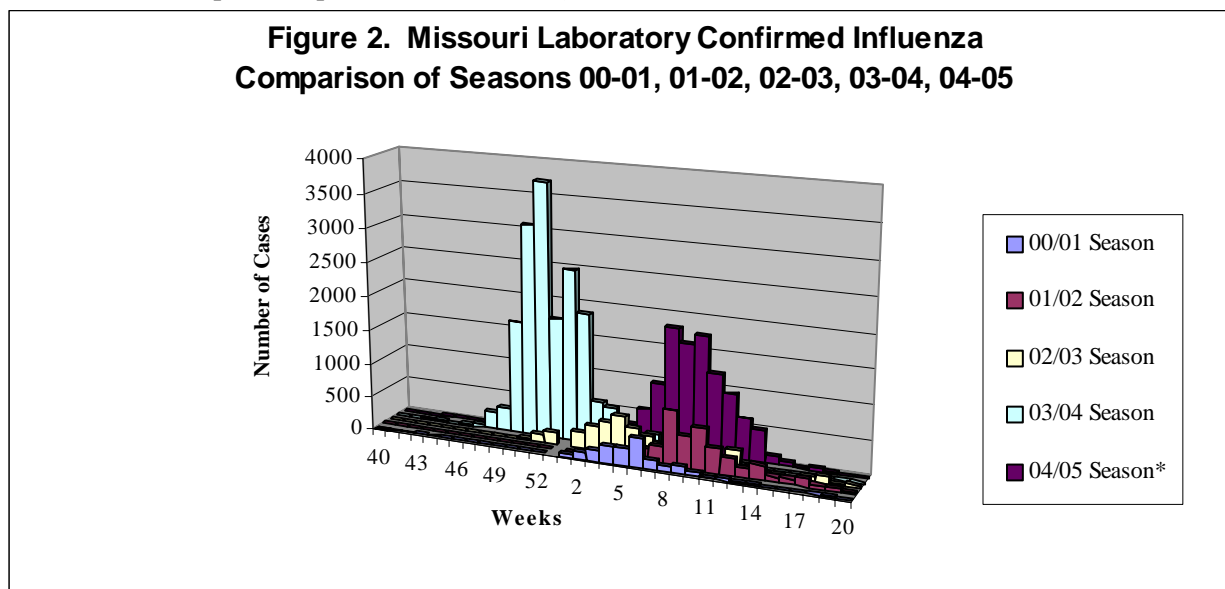
The 2004-2005 season began to show an increase in influenza activity in mid-October 2004 (**Figure 1**). Late January into early February the season began to rapidly increase in activity each week with the peak occurring in Weeks 7-9 (week ending February 19 through week ending March 5, 2005).



¹In order to be included in case counts for the influenza season a case must be laboratory-confirmed by either rapid testing or viral culture and must be reported beginning in Week 40 of one year through Week 20 of the next year.

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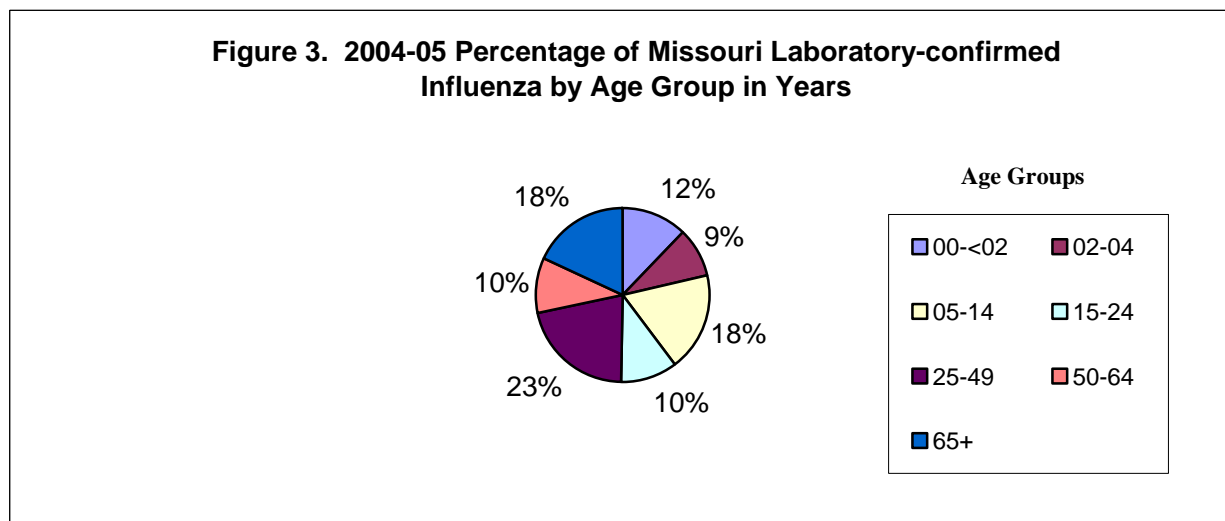
The case distribution of the 2004-2005 influenza season closely resembled the 2001-2002 season in the weeks where the peak occurred. The characteristic seasonal curve appeared to drift back toward the median when compared to previous seasons (**Figure 2**).



*Provisional Data

It should be noted that reports of influenza incidence have increased in the past few seasons because of the widening availability and use of CLIA-waived rapid influenza tests. During the past two seasons, improved insurance reimbursement for the use of these rapid tests must be considered as a compounding variable in these increases in reporting as well.

Influenza A viruses predominated the 2004-2005 season and affected all age groups much more evenly than in 2003-2004. The highest number of laboratory-confirmed influenza (23%) was reported among adults aged 25-49 years (**Figure 3**). The groups with the next highest percentage of reported laboratory-confirmed influenza (18% each) were those aged 5-14 years and 65+ years. The lowest percentage (9%) was reported among those aged 2-4 years. In comparison, the 2003-04 season had the highest percentage (approximately 34%) of cases among those 2-4 years of age. The lowest percentage (4%) was reported in the 50-64 age group.



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For the 2003-04 influenza season, CDC and ACIP encouraged influenza vaccination of healthy children 6 months to 23 months of age because they are at increased risk of influenza-related complications and hospitalization. In 2004, for the 2004-05 influenza season, CDC and ACIP issued a recommendation that healthy children age 6 months to 23 months and close contacts of these children be vaccinated. However, the influenza vaccine shortage in 2004-05 may have decreased the number of children in this age group who were able to receive an influenza vaccination.

In comparison to the previous five seasons, the 2004-2005 season was classified as one of the more severe seasons Missouri has recently experienced (**Table 1**). Once again it should be noted that the changes in diagnostic testing may have increased the number of reported cases of influenza. The vaccine shortage that existed in 2004-2005 may also have had an affect on the increased number of individuals experiencing influenza as well.

Table 1. Classification of Season, from 1999-2000 through 2004-2005 Seasons

Season	Case Count	Classification of Season
2004-2005	10,855	Moderate to Severe
2003-2004	17,834	Severe
2002-2003	4,318	Mild to Moderate
2001-2002	4,115	Mild to Moderate
2000-2001	1,896	Mild
1999-2000	3,820	Mild to Moderate